### U.S. DEPARTMENT OF TRANSPORTATION

# PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION (PHMSA)

# EXAMPLE CLASS LOCATION SPECIAL PERMIT TYPICAL CONDITIONS - June 1, 2011

Upon receipt of a complete and proper application by gas pipeline operators, PHMSA reviews applications, and if consistent with pipeline safety, may grant special permits that waive the requirements in 49 CFR 192.611. To compensate for waiving those requirements, PHMSA specifies additional compensatory requirements, to which operators must comply as long as the special permit is in effect. Additional compensatory requirements are determined based on the specific circumstances and conditions associated with each application. However, such class location special permits are typically subject to most of the following conditions:

### **Conditions:**

PHMSA grants this special permit subject to the following conditions:

- 1) <u>Corporate initials</u> must continue to operate the *special permit segments* at or below their existing MAOP as follows: <u>pipeline name</u> MAOP <u>number psig</u>.
- 2) Corporate initials must incorporate the *special permit segments* into its written integrity management program (IMP) as a "covered segment" in a "high consequence area (HCA)" in accordance with 49 CFR § 192.903, except for the reporting requirements contained in 49 CFR § 192.945. Corporate initials need not include the *special permit segments* described in this special permit in its IMP baseline assessment plan unless those areas meet the conditions of an HCA in accordance with 49 CFR § 192.905.

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- 3) Corporate initials must perform a close interval survey (CIS) of the pipeline name pipelines along the entire length of all *special permit inspection areas*<sup>1</sup> and remediate any areas of inadequate cathodic protection no later than one (1) year after the grant of this special permit. However, a CIS need not be performed, if Corporate initials has performed a CIS and completed remediation<sup>2</sup> including damaged coating repair on the pipeline name along the entire length of all *special permit inspection areas* less than four (4) years prior to the grant of this special permit. If factors beyond Corporate initials control prevent the completion of the CIS and remediation activities within the one (1) year from the grant of this special permit, a CIS and subsequent remediation including coating repair must be completed as soon as practicable and a letter justifying the delay and providing the anticipated date of completion must be submitted to the Director, PHMSA Name Region<sup>3</sup> no later than one (1) year after the grant of this special permit.
- 4) Corporate initials must perform a periodic CIS of the *special permit segments* at the applicable reassessment interval(s) for a "covered segments" determined in concert and data integrated with in-line inspection (ILI) in accordance with 49 CFR 192 Subpart O reassessment intervals as contained in 49 CFR §§ 192.937 (a) and (b) and 192.939, not to exceed a seven (7) year reassessment interval. Condition 24 (e) Data Integration gives a complete description of data integration information that an operator must maintain for a special permit in the *special permit segments* and *special permit inspection areas*.
- 5) Within one (1) year of the grant of this special permit <u>Corporate initials</u> must perform a Direct Current Voltage Gradient (DCVG) survey or an Alternating Current Voltage Gradient (ACVG) survey of each *special permit segment* to determine the pipeline coating conditions and must then remediate any integrity issues including external coating repairs in each *special permit segment*. However, a DCVG or ACVG survey and subsequent remediation

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<sup>&</sup>lt;sup>1</sup> Each condition that requires <u>Corporate initials</u> to perform an action with respect to the *special permit inspection areas* shall also require <u>Corporate initials</u> to perform that action on all *special permit segments* within such areas.

<sup>&</sup>lt;sup>2</sup> The terms "remediate" or "remediation" of pipe coating shall include repair of damaged external pipe coating.

<sup>3</sup> In the case of any Special Permit condition that requires <u>Corporate initials</u> to provide documentation to the PHMSA Region, <u>Corporate initials</u> must also send a copy of such documentation to the <u>insert appropriate state</u> authority.

need not be performed on the *special permit segment* if Corporate initials has performed a DCVG or ACVG and remediation on the pipeline name pipelines along the entire length of all *special permit inspection areas* less than four (4) years prior to the grant of this special permit. Corporate initials must remediate any damaged coating indications found during these assessments that are classified as moderate (i.e. 35% IR and above for DCVG or 50 dBμV and above for ACVG) or severe based on NACE International Recommended Practice 0502-2002, "Pipeline External Corrosion Direct Assessment Methodology", (NACE RP 0502-2002<sup>4</sup>). A minimum of two (2) coating survey assessment classifications must be excavated, classified and/or remediated per each survey crew per each time the survey is performed. If factors beyond Corporate initials control prevent the completion of the DCVG or ACVG survey and remediation within the one (1) year from the grant of this special permit, a DCVG or ACVG survey and remediation must be performed as soon as practicable and a letter justifying the delay and providing the anticipated date of completion must be submitted to the Director, PHMSA Name Region no later than one (1) year after the grant of this special permit.

- 6) <u>Corporate initials</u> must evaluate the <u>pipeline name</u> pipelines for stress corrosion cracking (SCC) as follows:
  - a) Corporate initials must perform a stress corrosion cracking direct assessment (SCCDA) or other appropriate assessment method for SCC [such as pressure test or in-line inspection (ILI) with a crack detection tool] of the pipeline name pipelines along the entire length of all *special permit inspection areas* according to the requirements of 49 CFR § 192.929 and/or NACE SP 0204-2008 no later than one (1) year after of the grant of this special permit. The SCCDA or other approved method must address both high pH SCC and near neutral pH SCC.
    - i) If factors beyond <u>Corporate initials</u> control prevent the completion of the SCCDA survey and remediation within the one (1) year from the grant of

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<sup>&</sup>lt;sup>4</sup> When PHMSA adopts a revised edition of a referenced NACE International (NACE) or ASME standard into 49 CFR Part 192, the referenced requirements of those revised standards are automatically incorporated into these special permit conditions.

- this special permit, a SCCDA and remediation must be performed as soon as practicable and a letter justifying the delay and providing the anticipated date of completion must be submitted to the Director, PHMSA Name Region no later than one (1) year after the grant of this special permit.
- ii) Corporate initials may eliminate this Condition 6 (a), provided Corporate initials provides an engineering assessment showing that the pipeline does not meet the criteria for either near neutral or high pH SCC in accordance with the applicable edition of the American Society of Mechanical Engineers Standard B31.8S, "Managing System Integrity of Gas Pipelines" (ASME B31.8S), Appendix A3, or NACE SP 0204-2008, "Stress Corrosion Cracking (SCC) Direct Assessment Methodology", Section 1.2.1.1 and 1.2.2.
- iii) A SCCDA need not be performed if <u>Corporate initials</u> has performed a SCCDA of the <u>pipeline name</u> pipeline along the entire length of the *special permit inspection areas* less than four (4) years prior to the grant of this special permit.
- b) If the threat of SCC exists as determined in Condition 6 (a) and when the Corporate initials pipeline name pipeline is exposed for any reason in the special permit inspection areas and the coating has been identified as poor during the pipeline examination, then Corporate initials must directly examine the pipe for SCC using an accepted industry detection practice such as dry or wet magnetic particle tests. Poor coating is a coating that is damaged, is losing adhesion to the pipe which is shown by falling off the pipe, is porous, has pin holes, and/or shields the cathodic protection. In addition to visual inspection, holiday detection testing at the proper voltage must also be performed.

  Corporate initials must keep coating records of all excavation locations for the special permit inspection areas to demonstrate the coating condition.
- c) If SCC<sup>5</sup> activity is discovered by any means within the *special permit inspection area* in similar pipe and pipe coating vintage [in accordance with 49 CFR § 192.917 (e)], or has had an in service or hydrostatic test SCC failure or leak; the *special permit segment* must

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<sup>&</sup>lt;sup>5</sup>"SCC" activity shall be defined as over both 10 percent wall thickness depth and 2-inches in length.

be further assessed and mitigated, using one of the following methods, within six (6) months of finding SCC:

- i) Hydrostatic test program
  - A. The SCC hydrostatic test program must be performed at an interval no greater than seven (7) years (but may be at a lesser interval in accordance with the results of an engineering critical assessment) in the *special permit segment*.
  - B. If pipe in the *special permit segment* leaks or ruptures during a hydrostatic test due to SCC, all pipe in the *special permit segment* must be replaced with new pipe.
- ii) Crack detection tool assessment
  - A. SCC detection tool must be run in the *special permit inspection area*,
  - B. All SCC<sup>6</sup> cracking found in the *special permit segment* must be replaced with new pipe,
- iii) Operating pressure lowered to 60% SMYS,
- iv) Replace all affected pipe to meet 49 CFR § 192.611 in the *special permit* segment.
- d) If any SCC activity is discovered in the *special permit inspection area*, Corporate initials must submit a SCC remediation plan to the Director, PHMSA Name Region with a copy to the Director, PHMSA Engineering and Research Division no later than 30 days after the finding of SCC:
  - i) That meets Condition 6 (c), including a SCC remediation/repair plan with SCC characterization and timing, or
  - ii) Technical justification that shows that the *special permit segment* is not at risk for SCC.
- 7) <u>Corporate initials</u> must submit the DCVG or ACVG, CIS, and SCCDA [or other PHMSA approved methods of determining SCC] findings including remediation actions in a written

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<sup>&</sup>lt;sup>6</sup> "SCC" activity shall be defined as over both 10 percent wall thickness depth and 2-inches in length.

report to the Director, PHMSA Name Region with a copy to the Director, PHMSA Engineering and Research Division, no later than one (1) year after the grant of this special permit.

- 8) Corporate initials must amend applicable sections of its operations and maintenance (O&M) manual(s) to incorporate the inspection and reassessment intervals by in-line inspection (ILI) including both metal loss and geometry tools of the <u>pipeline name</u> pipeline along the entire length of the *special permit inspection areas* at a frequency consistent with 49 CFR Part 192, Subpart O, but not to exceed a seven (7) year reassessment interval. [Deformation tools with +/- 1% accuracy may be considered as a replacement for geometry tools.]
- 9) <u>Corporate initials</u> must amend applicable sections of its O&M manual(s) to require the CIS inspection and reassessment intervals of the <u>pipeline name</u> pipeline *special permit segments* at a frequency consistent with 49 CFR Part 192, Subpart O, but not to exceed a seven (7) year reassessment interval.
- 10) Corporate initials must perform ILI assessment along the entire length of the *special permit inspection area* using ILI Tools (both high resolution magnetic flux leakage (HR-MFL) and either HR-geometry or deformation tools) and must remediate discovered conditions in accordance with Condition 20 of this permit. If ILI assessments have not been run within four (4) years of the grant of this special permit using both high resolution MFL and either HR-geometry or deformation tools, Corporate initials must complete initial ILI Tool inspections on the pipeline name pipeline within six (6) months of the grant of this special permit. Subsequent ILI assessments of the pipeline name pipeline along the entire length of the *special permit inspection areas* using ILI must conform to the required maximum reassessment intervals specified in 49 CFR § 192.939, but may not to exceed a seven (7) year reassessment interval.
- 11) <u>Corporate initials</u> must schedule ILI reassessment dates for the <u>pipeline name</u> pipeline along the entire length of the *special permit inspection areas* according to 49 CFR § 192.939 by

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adding the required time interval to the previous assessment date, but may not to exceed a seven (7) year reassessment interval.

- 12) <u>Corporate initials</u> must incorporate the applicable best practices of the Common Ground Alliance (CGA) into its damage prevention program within the *special permit inspection* areas.
- 13) <u>Corporate initials</u> must give a minimum of 14 days advance notice to the Director, PHMSA Name Region to enable him/her to observe the excavations relating to Conditions 5, 6 (b), 19, 20, 21, 22 and 23 [may need to add condition 24(g) and/or (h) here, if used] of field activities in the *special permit inspection areas*. Immediate response conditions do not require a 14-day advance notice, but the Director, PHMSA Name Region should be notified by <u>Corporate initials</u> no later than two (2) business days after the immediate condition is discovered.
- 14) <u>Corporate initials</u> must not let this special permit be a basis for deferring any of its assessments for HCAs in accordance with 49 CFR Part 192, Subpart O.
- 15) Within three (3) months following the grant of this special permit and annually thereafter, Corporate initials must report the following to the Director, PHMSA Name Region with copies to the Director, PHMSA Engineering and Research Division, and Director, PHMSA Standards and Rulemaking Division:
  - a) In the first annual report, <u>Corporate initial</u> must describe the economic benefits of the special permit including both the costs avoided from not replacing the pipe and the added costs of the inspection program. Subsequent annual reports should address any changes to these economic benefits.
  - b) In the first annual report, fully describe how the public benefits from energy availability.

    This should address the benefits of avoided disruptions as a consequence of pipe

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<sup>&</sup>lt;sup>7</sup> Annual reports must be received by PHMSA by the last day of the month in which the Special Permit is dated. For example, the annual report for a Special Permit dated <u>XXXX, 20xx</u>, must be received by PHMSA no later than <u>XXX</u>, each year beginning in <u>20xx</u>.

- replacement and the benefits of maintaining system capacity. Subsequent reports must indicate any changes to this initial assessment.
- c) The number of new residences, other structures intended for human occupancy and public gathering areas built within the *special permit inspection areas*.
- d) Any new integrity threats identified during the previous year and the results of any ILI or direct assessments performed during the previous year in the *special permit inspection* areas.
- e) Any reportable incident or any leak normally indicated on the DOT Annual Report, and all repairs on the pipeline that occurred during the previous year in the *special permit inspection areas*.
- f) Any on-going damage prevention initiatives affecting the *special permit inspection areas* and a discussion of the success of the initiatives.
- g) Annual data integration information, as required in Condition 24 (e) Data Integration.
- h) Any mergers, acquisitions, transfer of assets, or other events affecting the regulatory responsibility of the company operating the pipeline.
- 16) At least one (1) cathodic protection (CP) pipe-to-soil test station must be located within each HCA with a maximum spacing between test stations of one-half mile within an HCA. In cases where obstructions or restricted areas prevent test station placement, the test station must be placed in the closest practical location. This requirement applies to any HCA within the *special permit inspection areas*.
- 17) If any annual CP test station readings on the <u>pipeline name</u> pipeline within the *special permit inspection areas* fall below 49 CFR Part 192, Subpart I requirements, remediation must occur within six (6) months and include a CIS on each side of the affected test station to the next test station and any identified corrosion system modifications to ensure corrosion control. If factors beyond <u>Corporate initials</u> control prevent the completion of remediation including coating repairs within six (6) months, remediation must be completed as soon as practicable and a letter justifying the delay and providing the anticipated date of completion

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must be submitted to the Director, PHMSA<u>Name</u> Region no later than the end of the six (6) months completion date.

- 18) <u>Interference Currents Control</u>: <u>Corporate initials</u> must address induced alternating current (AC) from parallel electric transmission lines and other interference issues such as direct current (DC) in the *special permit inspection areas* that may affect the pipeline. An induced AC or DC program and remediation plan to protect the pipeline from corrosion caused by stray currents must be in place within one (1) year of the date of this special permit.
  - a) At least once every seven (7) calendar years not exceeding 80 months, Corporate initials must perform an engineering analysis on the effectiveness of the AC and DC mitigation measures and must evaluate any AC interference between 20 and 50 Amps per meter squared. In evaluating such interference, Corporate initials must integrate AC interference data with the most recent ILI results to determine remediation measures. If Corporate initials does not remediate AC interference between 20 and 50 Amps per meter squared, Corporate initials must provide an engineering justification for not remediating such interference to the Director, PHMSA Name Region, who may accept or reject the justification and require remediation.
  - b) Within three (3) months of the engineering analysis, <u>Corporate initials</u> must remediate any AC interference greater than 50 Amps per meter squared. Remediation means the implementation of performance measures including, but not limited to, additional grounding along the pipeline to reduce interference currents. Any DC interference that results in CP levels that do not meet the requirements of 49 CFR Part 192, Subpart I, must be remediated within three (3) months of this evaluation.
- 19) <u>Field Coating</u>: The coatings used on the pipeline and girth weld joints in the *special permit segments* must be non-shielding to CP. In the event that the coating type is unknown or is known to shield CP for girth weld joints then <u>Corporate initials</u> must take special care to:
  - a) Remove all shielding coatings such as shrink sleeves and replace them with a non-shielding coating in the *special permit segment* within six (6) months of receipt of this permit.

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- b) Analyze ILI logs in the areas of girth welds for potential corrosion indications.
- c) Any ILI corrosion indications above 30% wall loss at girth welds where the coating type is unknown, the girth weld joints must be exposed and evaluated each time the ILI is run or until the unknown girth weld coating is replaced.
- d) If any SCC<sup>8</sup> activity is found on girth welds or pipe in the *special permit segment*, the pipe and girth welds in the *special permit segment* must be remediated in accordance with Condition 6 within six (6) months of finding the SCC.

# 20) Anomaly Evaluation and Repair:

- a) General: Corporate initials must account for ILI tool tolerance and corrosion growth rates in scheduled response times and repairs and document and justify the values used. Corporate initials must demonstrate ILI Tool tolerance accuracy for each ILI Tool run by usage of calibration excavations and unity plots that demonstrate ILI Tool accuracy for depth within +10% accuracy for 80% of the time. The unity plots must show: a) actual anomaly depth versus predicted depth and b) actual failure pressure/MAOP versus predicted failure pressure/MAOP. Discovery date must be within 60 days of an ILI Tool run for each type ILI Tool (geometry, deformation or high resolution MFL).
  - i) ILI tool evaluations for metal loss must use "6t x 6t" interaction criteria (or more conservative criteria) for determining anomaly failure pressures and remediation response timing with "6t" being pipe wall thickness times six.
- b) Dents: Corporate initials must repair dents to the pipeline name pipelines in the special permit inspection areas in accordance with 49 CFR § 192.933 repair criteria. Special permit inspection areas must have a geometry or deformation tool inspection as part of the initial ILI, if no geometry or deformation tool has been completed it must be completed and all dent repairs made in accordance with 49 CFR § 192.933 repair criteria. The geometry tool can be from past ILI inspections. The timing for these dent repairs should follow Corporate initials O&M Manual but must not be longer than one (1) year after discovery.

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<sup>&</sup>lt;sup>8</sup> "SCC" activity shall be defined as over both a 10 percent wall thickness depth and 2-inches in length.

- c) <u>Investigation and Repair Criteria</u>: Investigation, evaluation, and repair criteria applies to all anomalies located on the <u>pipeline name</u> pipeline within the *special permit segments* and *special permit inspection area* when they have been excavated, investigated, and remediated in accordance with 49 CFR §§ 192.485 and 192.933 incorporating appropriate class location design factors in the anomaly repair criteria, including HCAs<sup>9</sup> as follows:
  - Special permit segments Repair any anomaly within a special permit segment that meets either: (1) a failure pressure ratio <sup>10</sup> (FPR) less than or equal to 1.39 for original Class 1 location pipe in a Class 3 location operating up to 72% of the specified minimum yield strength (SMYS); or (2) an anomaly depth greater than or equal to 40% of pipe wall thickness.
  - Special permit inspection areas Repair any anomaly within a special permit inspection area that meets either: (1) an FPR less than design factor for Class 1 location FPR equal to or less than 1.39; for Class 2 location FPR equal to or less than 1.67; and for Class 3 location FPR equal to or less than 2.0; or (2) an anomaly depth equal to or greater than 60% wall thickness loss.
    - Repair anomalies in original Class 1 location pipe that are now in a Class 2 location in accordance with 49 CFR §§ 192.5 and 192.611 that meets either:
       (1) is equal to or less than the Class 1 location FPR of 1.39; or (2) an anomaly depth equal to or greater than 50% wall thickness loss for anomaly repairs.
    - Repair anomalies in original Class 2 location pipe that is now in a Class 3 location in accordance with § 192.611 that meets either: (1) is equal to or less than the Class 2 location FPR of 1.67; or (2) an anomaly depth equal to or greater than 50% wall thickness loss for anomaly repairs.
- d) <u>Response Time for ILI Results</u>: The following section provides the required timing for excavation, investigation, and remediation of anomalies based on ILI data results

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<sup>&</sup>lt;sup>9</sup> HCAs in the *special permit inspection area* and *special permit segment* must have anomalies evaluated and repaired based upon the most stringent requirements of either: this special permit, 49 CFR Part 192, Subpart O, and Corporate initials Integrity Management Plan.

<sup>10</sup> Failure pressure ratio (FPR) is based upon the class location where the *special permit segment* or *special permit* 

<sup>&</sup>lt;sup>10</sup> Failure pressure ratio (FPR) is based upon the class location where the *special permit segment* or *special permit inspection area* pipe is located in accordance with 49 CFR § 192.5 and is the reciprocal of the class location design factor in 49 CFR § 192.111(a).

in accordance with 49 CFR §§ 192.485 and 192.933, and must incorporate appropriate class location design factors in the anomaly repair criteria for *special permit segments* and *special permit inspection areas* including all HCAs.

Reassessment by ILI will reset the timing for anomalies not already investigated and/or repaired. Corporate initials must evaluate ILI data by using either the ASME Standard B31G, "*Manual for Determining the Remaining Strength of Corroded Pipelines*" (ASME B31G), the modified B31G (0.85dL) or R-STRENG for calculating the predicted FPR to determine anomaly responses.

## Special permit segments:

- <u>Immediate response</u>: Any anomaly within a *special permit segment* operating up to 72% SMYS that meets either: (1) an FPR equal to or less than 1.1; or (2) an anomaly depth equal to or greater than 80% wall thickness loss.
- One-year response: Any anomaly within a *special permit segment* with original Class 1 location pipe in a Class 3 location operating up to 72% SMYS that meets either: (1) an FPR equal to or less than 1.39; or (2) an anomaly depth equal to or greater than 40% wall thickness loss.
- Monitored response: Any anomaly within a *special permit segment* with original Class 1 location pipe in a Class 3 location operating up to 72% SMYS that meets both: (1) an FPR greater than 1.39; or (2) an anomaly depth less than 40% wall thickness loss. The schedule for the response must take tool tolerance and corrosion growth rates into account.

# Special permit inspection area:

- <u>Immediate response:</u> Any anomaly within a *special permit inspection area* operating up to 72% SMYS that meets either: (1) an FPR equal to or less than 1.1; (2) an anomaly depth equal to or greater than 80% wall thickness loss.
- One-year response: Any anomaly within a *special permit inspection area* that meets either: (1) an FPR less than design factor for Class 1 location- FPR equal to or less than 1.39; Class 2 location FPR equal to or less than 1.67; and for Class 3 location FPR equal to or less than 2.0; or (2) an anomaly depth equal to or greater than 60% wall thickness loss.

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Any anomaly for Class location changes from original Class 1 to 2 location or original Class 2 to 3 location in accordance with 49 CFR §§ 192.5 and 192.611 that meets either: (1) an anomaly FPR equal to or less than the FPR of the original Class location; or (2) an anomaly depth equal to or greater than 50% wall thickness loss.

Monitored response: Any anomaly within a *special permit inspection area* that meets both: (1) an FPR less than design factor – for Class 1 location – FPR greater than 1.39; Class 2 location – FPR greater than 1.67; and for Class 3 location – FPR greater than 2.0; or (2) an anomaly depth less than 60% wall thickness loss.

Any anomaly repairs for Class location changes from original Class 1 to 2 location or original Class 2 to 3 location in accordance with 49 CFR §§ 192.5 and 192.611 that meets both: (1) an anomaly FPR greater than the FPR of the original Class location; or (2) an anomaly depth less than 50% wall thickness loss.

- The schedule for the response must take tool tolerance and corrosion growth rates into account.
- e) Special permit segments and special permit inspection area: Upon grant of this special permit, Corporate initials must implement the repair and remediation of any pipe anomalies or dents that does not meet Condition 20 based upon existing ILI assessments results from the high resolution MFL and geometry/caliper tools used to previously assess the pipeline name in the special permit segments and special permit inspection areas. Remediation of anomalies and dents must be completed in accordance with Condition 20 timing requirements and completed within 12 months from grant of this special permit.
- 21) <u>Corporate initials</u> must provide records to PHMSA to demonstrate the girth welds on the <u>pipeline name</u> pipelines were nondestructively tested at the time of construction in accordance with:

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- a) The Federal pipeline safety regulations at the time the pipelines were constructed. If not, show that at least 10% of the girth welds in each *special permit segment* were non-destructively tested (NDT) after construction but prior to the application for this special permit provided at least two (2) girth welds in each *special permit segment* were excavated and NDT inspected.
- b) If <u>Corporate initials</u> cannot provide girth weld records to PHMSA to demonstrate either of the above in Condition 21 (a), <u>Corporate initials</u> must accomplish either (i); or (ii) and (iii) of the following:
  - i) Certify to PHMSA in writing that there have been no in-service leaks or breaks in the girth welds on the <u>pipeline name</u> pipelines within the entire special permit inspection areas for the entire life of the pipelines, or
  - Evaluate the terrain along each *special permit segment* for threats to girth weld integrity from soil or settlement stresses and remediate all such integrity threats; and
  - iii) Excavate<sup>11</sup>, visually inspect and nondestructively test at least two (2) girth welds on the <u>pipeline name</u> pipelines in each *special permit segment* in accordance with the American Petroleum Institute Standard 1104, "Welding of Pipelines and Related Facilities" (API 1104) as follows:
    - A. Use the edition of API 1104 current at the time the pipelines were constructed; or
      - B. Use the edition of API 1104 recognized in the Federal pipeline safety regulations at the time the pipelines were constructed; or
      - C. Use the edition of API 1104 currently recognized in the Federal pipeline safety regulations.
- c) If any girth weld in any of the *special permit segments* is found unacceptable in accordance with API 1104, <u>Corporate initials</u> must repair the girth weld immediately and then prepare an inspection and remediation plan for all remaining girth welds in the *special permit segments* based upon the repair findings and the threat to the

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<sup>&</sup>lt;sup>11</sup> Corporate initials must evaluate for SCC any time the <u>pipeline name</u> pipelines are uncovered in accordance with Condition 6 (b) of this special permit.

- special permit segments. Corporate initials must submit the inspection and remediation plan for these remaining girth welds to the Director, PHMSA Name Region and remediate girth welds in the special permit segments in accordance with the inspection and remediation plan within 60 days of finding girth welds that do not meet this Condition 21 (c).
- d) Additionally, all oxy-acetylene girth welds, mechanical couplings and wrinkle bends in any *special permit segment* must be removed.
- e) Corporate initials must complete the girth weld testing, and the girth weld inspection and remediation plan, within six (6) months after the grant of this special permit. If factors beyond Corporate initials control prevent the completion of these tasks within six (6) months, the tasks must be completed as soon as practicable and a letter justifying the delay and providing the anticipated date of completion must be submitted to the Director, PHMSA Name Region no later than six (6) months after the grant of this special permit.
- 22) <u>Corporate initials</u> must identify all shorted casings (metallic or electrolytic) within each *special permit segment* no later than six (6) months after the grant of this special permit and classify any shorted casings as either having a "metallic short" (the carrier pipe and the casing are in metallic contact) or an "electrolytic short" (the casing is filled with an electrolyte) using a commonly accepted method such as the Panhandle Eastern, Pearson, DCVG, ACVG or AC Attenuation.
  - a) Metallic Shorts: Corporate initials must clear any metallic short on a casing in the *special permit segments* no later than six (6) months after the short is identified.
  - b) <u>Electrolytic Shorts</u>: <u>Corporate initials</u> must remove the electrolyte from the casing/pipe annular space on any casing in the *special permit segments* that has an electrolytic short no later than six (6) months after the short is identified.
  - c) All Shorted Casings: Corporate initials must install external corrosion control test leads on both the carrier pipe and the casing in accordance with 49 CFR § 192.471 to facilitate the future monitoring for shorted conditions and may then choose to fill the casing/pipe annular space with a high dielectric casing filler or other material which

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provides a corrosion inhibiting environment provided an assessment and all repairs were completed.

If <u>Corporate initials</u> identifies any shorted casings within the *special permit segments*, they must monitor 12 all casings within the *special permit segments* for shorts at least once each calendar quarter, but at intervals not to exceed 100 days, for four (4) consecutive calendar quarters after the grant of this special permit. The intent is to identify through monitoring the calendar quarter(s) when electrolytic casing shorts are most likely to be identified.

Thereafter, <u>Corporate initials</u> must then monitor all casings for shorts within the *special permit segments* at least once each calendar year during the calendar quarter(s) when electrolytic casing shorts are most likely to be identified. Any casing shorts found in the *special permit segments* at any time must be classified and cleared as explained above.

- 23) Pipe Seam Evaluations: <u>Corporate initials</u> must identify any pipe in the *special permit* inspection area and the expanded special permit inspection area<sup>13</sup> that may be susceptible to pipe seam issues because of the vintage of the pipe, the manufacturing process of the pipe, or other issues. Once <u>Corporate initials</u> has identified such issues, <u>Corporate initials</u> must complete Condition 23(a). If the engineering analysis required in Condition 23(a) reveals that there is a threat to the pipeline, then <u>Corporate initials</u> must complete all of the applicable condition requirements in Condition 23 (b), (c), (d), (e), and (f):
  - a) Corporate initials must perform an engineering analysis to determine if there are any pipe seam threats on the pipeline name pipeline located in the *expanded special* permit inspection area. This analysis must include the documentation that the processes in 'M Charts' in "Evaluating the Stability of Manufacturing and Construction Defects in Natural Gas Pipelines" by Kiefner and Associates updated April 26, 2007, under PHMSA Contract DTFAA-COSP02120 and Figure 4.2, 'Framework for Evaluation with Path for the Segment Analyzed Highlighted' from

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<sup>&</sup>lt;sup>12</sup> Monitoring of casings in this situation means an acceptable test method in accordance with 49 CFR Part 192 to determine if the casing and carrier pipe have either a metallic or electrolytic short (connection or contact).

<sup>&</sup>lt;sup>13</sup> The *expanded special permit inspection area* is defined as "the *special permit inspection area*, the compressor station discharge area where the *special permit inspection area* is located, and the compressor discharge sections on either side of the *special permit inspection area*" and is from Mile Post XX.X to Mile Post XX.X.

- TTO-5 "Low Frequency ERW and Lap Welded Longitudinal Seam Evaluation" by Michael Baker Jr., and Kiefner and Associates, et. al. under PHMSA Contract DTRS56-02-D-70036 were utilized along with other relevant materials. If the engineering analysis shows that the pipe seam issues on the <u>pipeline name</u> pipeline located in the *expanded special permit inspection area* are not a threat to the integrity of the pipeline, <u>Corporate initials</u> does not have to complete Conditions 23 (b) through 23 (e). Condition 23 (f) must be completed.
- b) If a 49 CFR Part 192, Subpart J hydrostatic test has not been performed since 1971, the *special permit segments* must be hydrostatically tested to a minimum pressure of 100 percent SMYS, in accordance with 49 CFR Part 192, Subpart J requirements for eight (8) continuous hours, within one (1) year of issuance of this special permit. The hydrostatic test must confirm no systemic issues with the weld seam or pipe. A root cause analysis, including metallurgical examination of the failed pipe, must be performed for any failure experienced to verify that it is not indicative of a systemic issue. The results of this root cause analysis must be reported to the Director, PHMSA Name Region with a copy to the Director, PHMSA Engineering and Research Division, within 60 days of the failure; or
- c) If the pipeline in the *expanded special permit inspection area* has experienced a seam leak or failure in the last five (5) years and no hydrostatic test meeting the conditions of 49 CFR Part 192, Subpart J was performed after the seam leak or failure, then a hydrostatic test must be performed within one (1) year after the grant of this special permit on the *special permit segment* pipeline; or
- d) If the pipeline in any *special permit segment* has any low frequency electric resistance welded (LF-ERW) seam, direct current electric resistance welded (DC-ERW) seam, or electric flash welded (EFW) seam conditions as noted below in (i), (ii), (iii), or (iv), such *special permit segment* pipeline shall not be eligible for this special permit. Other pipe in *special permit segments* shall not be eligible for this special permit if it:
  - i) was constructed or manufactured prior to 1980 or has had any pipe seam leaks or ruptures in the *expanded special permit inspection area*, or

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- ii) has unknown manufacturing processes, or
- iii) has low fracture toughness pipe that will not ensure ductile fracture and arrest, or
- iv) has known manufacturing or construction issues that are unresolved [such as concentrated hard spots, hard heat-affected weld zones, selective seam corrosion, pipe movement that has led to buckling, have had past leak and rupture issues, or any other systemic issues].

Double Submerged Arc Welded (DSAW), Submerged Arc Welded (SAW), or Electric Resistance Weld (ERW) seam pipe is acceptable if it does not have conditions as noted in Condition 23(d) - (i), (ii), (iii) and (iv).

- e) If the pipeline in any *special permit segment* has a reduced longitudinal joint seam factor, below 1.0, as defined in 49 CFR § 192.113 the special permit segment pipeline must be replaced.
- f) All pipe installed in special permit segments and special permit inspection areas must have all weld seam or girth weld repairs that have been made by the usage of fittings such as weldolets, threadolets, repair clamps and pipe sleeves removed and replaced with pipe in accordance with 49 CFR Part 192 requirements.
- g) Corporate initials must remediate all weld seam leaks or ruptures discovered in the special permit inspection area. Corporate initials must submit a seam remediation plan for the *special permit inspection area* to the Director, PHMSA Name Region with a copy to the Director, PHMSA Engineering and Research Division no later than 30 days after the finding a seam leak or failure/rupture in the special permit inspection area and the expanded special permit inspection area <sup>14</sup>:
  - i) Longitudinal weld seam remediation/repair plan that meets Condition 23 (a) and includes either replacement, hydrostatic testing, or in-line inspection (ILI), and timing of the plan not to exceed six (6) months, or
  - ii) Technical justification that shows that the *special permit segment* is not at risk for future longitudinal seam leaks or failures.

<sup>&</sup>lt;sup>14</sup> The expanded special permit inspection area is defined as "the special permit inspection area, the compressor station discharge area where the *special permit inspection area* is located, and the compressor discharge sections on either side of the *special permit inspection area*" and is from Mile Post XX.X to Mile Post XX.X.

- 24) [This section should include items Operator told PHMSA in application letter they would conduct in the special permit segment or area.] (Note: 24(g) below may not be required, pipelines without documentation of API 5L specifications and mechanical/chemical properties tests (mill test reports) will probably not be approved. 24(h) may not be required in most situations, but will be reviewed and considered.)

  Corporate initials must comply with the following requirements.
  - a) Corporate initials must complete within six (6) months of the grant of this special permit a depth of cover survey of the *special permit segments*. Any pipe in the *special permit segments* that does not meet 49 CFR § 192.327(a) must have additional safety measures implemented in areas with reduced depth of cover.

    Corporate initials must submit to the Director, PHMSA Name Region for PHMSA approval remedial measures to implement based upon the threat, such as lowering the pipeline, increased pipeline patrols and/or additional line markers.
  - b) <u>Corporate initials</u> must install and maintain line-of-sight markings on the pipeline in the *special permit segments* and *special permit inspection areas* except in agricultural areas or large water crossings such as lakes where line-of-sight signage is not practical.
  - c) <u>Corporate initials</u> must install pipeline warning tape in all integrity excavations in the *special permit segments* and *special permit inspection areas*.
  - d) Corporate initials must perform ground or aerial right-of-way patrols, monthly not to exceed 45 days, in the *special permit segments* and *special permit inspection areas*. Each calendar year not to exceed 15 months, one of these right-of-way patrols must be a ground patrol in the *special permit segments* and *special permit inspection areas*. All patrols must document compliance with Condition 12 and Conditions 24 (b) and (c).
  - e) <u>Data Integration</u>: <u>Corporate initials</u> must maintain data integration of special permit conditions findings and remediation in the *special permit segments* and *special permit inspection areas*. Data integration must include the following information: Pipe diameter, wall thickness, grade, and seam type; pipe coating

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including girth weld coating; maximum allowable operating pressure (MAOP); class location (including boundaries on aerial photography); high consequence areas (HCAs) (including boundaries on aerial photography); hydrostatic test pressure including any known test failures; casings; any in-service ruptures or leaks; in-line inspection (ILI) survey results including HR-MFL, HR-geometry/caliper or deformation tools; close interval survey (CIS) surveys – all; depth of cover surveys; rectifier readings – past 5 years; test point survey readings – past 5 years; AC/DC interference surveys; pipe coating surveys; pipe coating and anomaly evaluations from pipe excavations; stress corrosion cracking (SCC) excavations and findings; and pipe exposures from encroachments. Data integration must be outlined on pipeline route sheets (scale of 1-inch = 100 up to 500-feet on "D (24"x36") or E (36"x42")" size drawings or similar size drawings), with parallel sections for each integrity category and recent aerial photography (recent photography, within 24 months of initial filing and every 3-years thereafter). Data integration must be updated on a continuing basis and with at least a semi-annual review of integrity issues to be remediated.

- f) Corporate initials must notify PHMSA's Name Regional Director within five (5) days, if a leak or rupture (incident) occurs in any of the *special permit inspection* areas and *special permit segments*. A root cause analysis must be performed to determine the cause of the failure and must be sent to PHMSA's Name Regional Director and Director of Engineering and Research Division within 60-days of the incident. PHMSA will review the root cause analysis report to determine if revocation, suspension, or modification of the special permit is warranted based upon incident findings.
- g) <u>Corporate initials</u> must mechanically and hydrostatically test pipe in each *special permit segment* that does not meet Condition 25 (b) as follows:
  - i) Test a minimum of 10% of pipe lengths/joints, or at least two (2) pipe lengths/joints when percentage is less than two (2) pipe lengths/joints, must be tested in accordance with 49 CFR §§ 192.109 and 192.107(b).

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- ii) Special permit segments pipe must meet the requirements of 49 CFR § 192.107 (b).
- *iii)* Special permit segments pipe must be tested for mechanical and chemical properties (properties) as required in 49 CFR Part 192, Appendix B, Section III (B) and (C).
- iv) Pipe that is tested for properties in accordance with Condition 24 (a) (i),(a)
  (ii) and (a)(iii), must meet the hydrostatic test requirements of 49 CFR
  Part 192, Appendix B, Section III (C)(2). Original Class 1 location pipe that is approved for Class 3 locations per this special permit must be tested to a minimum of 100% SMYS for 8 continuous hours in accordance with 49
  CFR Part 192, Subpart J.
- v) The requirements in Condition 24 (g) must be completed within one (1) year of issuance of this special permit and must meet pipe properties requirements for the pipe designed class location factor in accordance with 49 CFR § \$ 192.103. 192.105, 192.107, 192.109, 192.111 and 192.113.
- h) <u>Deformation Tool</u>: (<u>NOTE Case by case evaluation, must also consider if</u>

  <u>Hydrotest to 100 % SYMS should be required in Condition 24 to detect low strength</u>

  <u>pipe</u>)
  - Corporate initials must run a deformation tool through all *special permit segments* and *special permit inspection areas* within six (6) months of the grant of this special permit and remediate all expanded pipe in accordance with PHMSA's "Interim Guidelines for Confirming Pipe Strength in Pipe Susceptible to Low Yield Strength" dated September 10, 2009, within 12 months of grant date of this special permit.
- 25) Corporate initials must maintain the following records for each special permit segment:
  - a) Documentation showing that each *special permit segment* has received a 49 CFR § 192.505, Subpart J, hydrostatic test for eight (8) continuous hours and at a minimum pressure of 1.25 times MAOP (1.25 x MAOP). If <u>Corporate initials</u> does not have hydrostatic test documentation, then the *special permit segment* must be

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- hydrostatically tested to meet this requirement within one year of the grant of this special permit.
- b) Documentation of mechanical and chemical properties including pipe toughness (mill test reports) showing that the pipe in each *special permit segments* meets the wall thickness, yield strength, tensile strength and chemical composition of either the American Petroleum Institute Standard 5L, 5LX or 5LS, "Specification for Line Pipe" (API 5L) referenced in the 49 CFR Part 192 code at the time of manufacturing or if pipe was manufactured and placed in-service prior to the inception of 49 CFR § 192 then the pipe meets the API 5L standard in usage at that time. Any *special permit segment* that Corporate initials does not have mill test reports for the pipe cannot be authorized per this special permit.
- c) Documentation of compliance with all the conditions of this special permit must be kept for the applicable life of this special permit for the referenced *special permit segments* and *special permit inspection areas*.
- 26) PHMSA may extend the original *special permit segments* to include contiguous segments of the <u>pipeline name</u> pipelines up to the limits of the *special permit inspection areas* pursuant to the following conditions. <u>Corporate initials</u> must:
  - a) Provide notice to the Director, PHMSA Name Region; Director, PHMSA Standards and Rulemaking Division; and Director, PHMSA Engineering and Research Division of a requested *special permit segment or extension* of the pipeline name pipeline based on actual class location change and include a schedule of inspections, of any anticipated remedial actions and the location of the new request including survey stationing. All requests for a *special permit segment or extension* must be submitted in the first nine (9) months of the 49 CFR § 192.611(d) timing limits, and must include data integration (see Condition 24 (e)) and information on the potential environmental impacts of the extension.
  - b) Complete all inspections and remediation of the proposed *special permit segments* extension to the extent required of the original the <u>pipeline name</u> pipeline *special permit segments*.

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- c) Comply with all the special permit conditions and limitations included herein to all future *special permit segments or extensions*.
- d) Comply with all conditions of this special permit for the contiguous new *special permit segments* required for implementation and certification in accordance with 49 CFR § 192.611(d) timing limits, including submittal of documents to PHMSA required in Condition 27.
- 27) <u>Certification</u>: A senior executive officer, vice president or higher, of <u>Corporate initials</u> must certify in writing the following:
  - a) <u>Corporate initials</u> pipeline *special permit inspection areas* and *special permit segments* meet the conditions described in this special permit,
  - b) The written manual of O&M procedures for the <u>Corporate initials</u> pipeline has been updated to include all additional requirements of this special permit; and
  - c) <u>Corporate initials</u> has implemented all conditions as required by this special permit.

Corporate initials must send the certifications required in Condition 27 (a) through (c) with completion date, compliance documentation summary, and the required senior executive signature and date of signature to the PHMSA Associate Administrator with copies to the Director, PHMSA Name Region; Director, PHMSA Standards and Rulemaking Division; and Director, PHMSA Engineering and Research Division within one (1) year of the grant date of this special permit.

# **Limitations:**

PHMSA grants this special permit subject to the following limitations:

- 1) PHMSA has the sole authority to make all determinations on whether <u>Corporate initials</u> has complied with the specified conditions of this special permit.
- 2) Failure to submit the certifications required by Condition 27 within the time frames specified therein will result in automatic revocation of this special permit.
- 3) Should <u>Corporate initials</u> fail to comply with any of the specified conditions of this special permit, PHMSA may revoke this special permit and require <u>Corporate initials</u> to comply with

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- the regulatory requirements in 49 CFR § <u>192.611</u>. As provided in 49 U.S.C. § 60122, PHMSA may also issue an enforcement action for failure to comply with this Order.
- 4) PHMSA may revoke, suspend or modify a special permit based on any finding listed in 49 CFR § 190.341(h)(1) and require Corporate initials to comply with the regulatory requirements in 49 CFR § 192.611.
- 5) Should PHMSA revoke, suspend or modify a special permit based on any finding listed in 49 CFR § 190.341(h)(1), PHMSA will notify <u>Corporate initials</u> in writing of the proposed action and provide <u>Corporate initials</u> an opportunity to show cause why the action should not be taken unless PHMSA determines that taking such action is immediately necessary to avoid the risk of significant harm to persons, property or the environment (see 49 CFR § 190.341(h)(2)).
- 6) The terms and conditions of any corrective action order, compliance order or other order applicable to a pipeline facility covered by this special permit will take precedence over the terms of this special permit in accordance with 49 CFR § 190.341(h)(4).
- 7) PHMSA grants this special permit for a period of no more than five (5) years from the grant date. If Corporate initials elects to seek renewal of this special permit, Corporate initials must submit its renewal request at least 180 days prior to expiration of the five (5) year period to the PHMSA Associate Administrator with copies to the Director, PHMSA Name Region 15; Director, PHMSA Standards and Rulemaking; and Director, PHMSA Engineering and Research Division. PHMSA will consider requests for a special permit renewal for up to an additional five (5) year period. All requests for a special permit renewal must include a summary report in accordance with the requirements in Condition 15 above and must demonstrate that the special permit is still consistent with pipeline safety. PHMSA may seek additional information from Corporate initials prior to granting any request for special permit renewal.

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<sup>&</sup>lt;sup>15</sup>In the case of any Special Permit condition that requires <u>Corporate initials</u> to provide documentation to the PHMSA Region, <u>Corporate initials</u> must also send a copy of such documentation to <u>insert appropriate state</u> <u>authority</u>.